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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,256	06/14/2001	Naoshi Kikuchi	SOHSH13.001AUS	6635

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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/881,256

Applicant(s)

KIKUCHI ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kikuchi et al. (JP 11-329083).

Kikuchi et al. discloses the invention as claimed in claims 1-13, see the corresponding U.S. document (2001/0017219), page 2 through page 7.

Specifically, Kikuchi et al. discloses the diameter  $d$  of the overhead cable being in a range of 36.6 to 52 mm (12.8 to 42.6 mm, see JP'083 the abstract), the number  $N$  being between 20 to 26 (see JP'083, col. 2, [0006],  $N=12-24$ ), the ratio of  $H/d$  being between 0.00656 to 0.00761 (see JP'083 abstract,  $H/d$  being in a range of 0.0045 to 0.0357), and the ratio of  $H/R$  being between 0.1412 to 0.1458 (see JP'083 abstract,  $H/R$  being in a range of 0.08 to 1.00). Kikuchi et al. also discloses the outermost members are comprised of a plurality of segments, wherein each segment is obtained by dividing the polygon at the vertexes, wherein each segment

has an inner surface having a partially arc-shaped sectional shape configured to substantially follow the outer contour of a set of inner cable strands, and wherein each segment has an outer surface having a flat sectional shape (see JP'083, Figure 2) connecting the adjoining vertexes, and wherein each segment has two corners of the flat outer surface formed to define each arc-shaped groove of the radius R and depth H together with the corners of the adjoining segments, and wherein the plurality of segments being arranged so that they adjoin each other so the corners of the adjoining segments form the arc-shaped grooves and to cover the outer circumference of the members positioned inside them and so that the plurality of arc-shaped grooves circle the overhead cable in spirals in the longitudinal direction at a predetermined pitch.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 6 of copending Application No. 09/727,070. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 6 of the copending application 09/727,070 recites the diameter (d), the number (N), the depth (H), and the radius (R) which all satisfy the formulas disclosed in the instant application. Claim 6 of App '070 also discloses the outermost members comprising a plurality of segments, each having an outer surface having a flat sectional shape connecting the adjoining vertexes and having two corners of the flat outer surface formed the arc-shaped groove.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 14 have been considered but are moot in view of the new ground(s) of rejection because JP'083 does teach an

overhead cable with a plurality of segments, each having an outer surface having a flat sectional shape (see JP'083, Figure 2).

Regarding claim 1, applicant argues that JP'083 does not disclose a cable having a diameter  $d$ , a ratio  $H/d$  and a ratio  $H/R$  as claimed. These arguments are not found persuasive because JP'083 does teach an overhead cable having a diameter  $d$  of 42.6 mm which is within the claimed range, a ratio  $H/d$  of 0.0045 to 0.0357 (the claimed range being within the JP'083 range), and a ratio  $H/R$  of 0.08 to 1.00 (the claimed range being within the JP'083 range).

### ***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen  
Primary Examiner  
Art Unit 2831